IN THE CLAIMS:

Please amend Claims 1, 5 and 9 as shown below. The claims as pending are as follows:

1. (Currently Amended) A coordinate input apparatus which detects three-dimensional position coordinates of an indicating tool used in combination with a display for displaying a window based on two-dimensional coordinates, comprising:

storage means for storing a plurality of a set of coordinate values of a plurality of points for defining each of a plurality kinds of a three-dimensional space area which is positioned at a relative coordinate position against a position of the display;

coordinate detection means for detecting a three-dimensional absolute coordinate value of the indicating tool in a three-dimensional space area;

determination means for determining which ~~whether the three-dimensional absolute coordinate value belongs to the~~ three-dimensional space area defined by each of the plurality of the set of coordinate values stored in said storage means the detected three-dimensional absolute coordinate value belongs to; and

conversion means for converting, responsive to a determination of said determination means that said three-dimensional absolute coordinate value belongs to said three-dimensional space area, a position of said three-dimensional absolute coordinate value in the three-dimensional space area into a display coordinate value of said display.

2. (Original) The apparatus according to claim 1, wherein said storage means stores a set of coordinate values of a plurality of points for defining each coordinate area for each of a plurality of types of coordinate input areas.

3. (Original) The apparatus according to claim 1, wherein said storage means further stores switch information indicating coordinate input operation of the indicating tool for each of the coordinate input areas.

4. (Original) The apparatus according to claim 1, wherein said storage means further stores a definition table for defining operation of executing predetermined processing corresponding to operation of a mouse with respect to a plurality of switches of the coordinate input area and the indicating tool.

5. (Currently Amended) A control method for a coordinate input apparatus which detects three-dimensional position coordinates of an indicating tool used in combination with a display for displaying a window based on two-dimensional coordinates, comprising:

a storage step of storing, in a storage medium, a plurality of a set of coordinate values of a plurality of points for defining each of a plurality kinds of a three-dimensional space area which is positioned at a relative coordinate position against a position of the display;

a coordinate detection step of detecting a three-dimensional absolute coordinate value of the indicating tool in a three-dimensional space area;

a determination step of determining which ~~whether a three-dimensional absolute coordinate value belongs to the~~ three-dimensional space area defined by each of the plurality of the set of coordinate values stored in the storage medium the detected three-dimensional absolute coordinate value belongs to; and

a conversion step of converting, responsive to a determination of said determination step that said three-dimensional absolute value belongs to said three-dimensional space area, a position of said three-dimensional absolute coordinate value in the determined three-dimensional space area into a display coordinate value of said display.

6. (Original) The method according to claim 5, wherein, in the storage step, a set of coordinate values of a plurality of points for defining each coordinate area for each of a plurality of types of coordinate input areas is stored in the storage medium.

7. (Original) The method according to claim 5, wherein, in the storage step, switch information indicating coordinate input operation of the indicating tool for each of the coordinate input areas is further stored in the storage medium.

8. (Original) The method according to claim 5, wherein, in the storage step, a definition table for defining operation of executing predetermined processing corresponding to operation of a mouse is further stored in the storage medium with respect to a plurality of switches of the coordinate input area and the indicating tool.

9. (Currently Amended) A computer-readable memory storing a program code for controlling a coordinate input apparatus which detects three-dimensional position coordinates of an indicating tool used in combination with a display for displaying a window based on two-dimensional coordinates, wherein the program code includes:

a program code for a storage step of storing, in a storage medium, a plurality of a set of coordinate values of a plurality of points for defining each of a plurality kinds of

a three-dimensional space area which is positioned at a relative coordinate position against a position of the display;

a program code for a coordinate detection step of detecting a three-dimensional absolute coordinate value of the indicating tool in a three-dimensional space area;

a program code for a determination step of determining which ~~whether a three-dimensional absolute coordinate value belongs to the~~ three-dimensional space area defined by each of the plurality the set of coordinate values stored in the storage medium the detected three-dimensional absolute coordinate value belongs to; and

a program code for a conversion step of converting, responsive to a determination of said determination step that said three-dimensional absolute value belongs to said three-dimensional space area, a position of said three-dimensional absolute coordinate value in the determined three-dimensional space area into a display coordinate value of said display.

10. (Previously Presented) The apparatus according to claim 1, wherein said converting means calculates two-dimensional coordinate values in one of planes comprising the three-dimensional space area, and converts the two-dimensional coordinate values into the display coordinate value on the basis of a predetermined magnification and offset.

11. (Previously Presented) The method according to claim 5, wherein said converting step calculates two-dimensional coordinate values in one of planes comprising the three-dimensional space area, and converts the two-dimensional coordinate

valucs into the display coordinate value on the basis of a predetermined magnification and offset.